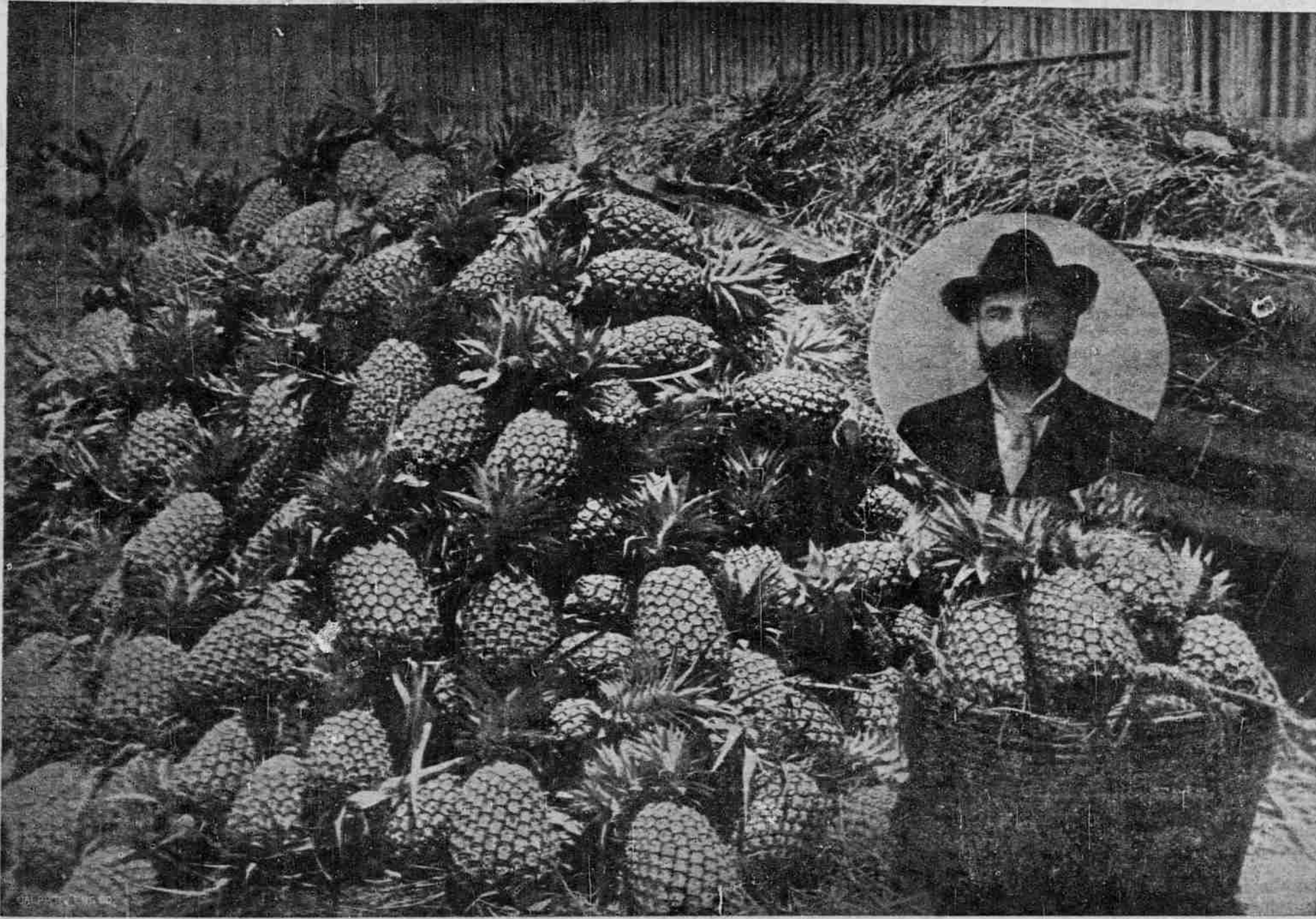


# PINEAPPLES, A PROFITABLE PRODUCT.



HAWAIIAN PINEAPPLES AND THE LATE D. G. CAMARINOS, A PROMINENT EXPORTER.

## VANILLA.

By EDWARD H. EDWARDS in Governor Carter's annual report to the Secretary of the Interior:

Of itself the most valuable of what may be termed the aerial parasites, the vanilla vine promises to give to the tropical islands of the United States a new source of revenue and an added importance in the domestic economy of the country. For half a century at various points throughout the Hawaiian archipelago vanilla plants have been grown, more as a matter of experiment or for effect than in an attempt to produce a profitable crop. The plant has flourished wherever it was given attention, and to the efforts of Allan Herbert, at one time commissioner of agriculture under the Kingdom, is largely due the success which now seems about to crown the efforts to make productive this new industry.

Tropical in its nature, thriving best upon the soft, spongy growths, it was but natural that the vanilla plant should thrive wonderfully in our protected districts. Experience has proven that nowhere do the conditions necessary exist in greater perfection than in the Kona or southern side of the large island of the group, Hawaii. There is found a rich soil, decomposed lava, with an average of 80 to 100 inches of rainfall, and the growth of primitive forest to furnish the shelter for the vines. Although an aerial plant, the vanilla adapts itself to a variety of soils. For instance, where a fern tree has found foothold among the rocks the vanilla will make its home, or in the free soil of the Aa or light lava, it will grow as luxuriantly. The vines require support, and it is best for their success that these be natural rather than artificial. These facts make possible a new development among the deserted coffee plantations, which ceased to be profit paying some time since. The tree fern and ti plant both offer excellent natural supports and furnish the needed sustenance for the vines.

The great difficulty so far has been in the procuring of the cuttings from which to start the plantation. Importations have been made from India and from the Caribbean Sea and Central America, but a majority of these plants have failed to adapt themselves to the climate. Some few have lived and from these cuttings were made within the first year, so that the original vine multiplies itself many times. In the experience of the pioneer in this line in the islands, E. H. Edwards, Vanilla Park estate, Napoopoo, more than 20,000 cuttings were imported to get 5,000 vines; or, to put it differently, bringing in a sufficient number of plants to start a 20-acre plantation he found himself with but 5 acres growing.

The vine grows rapidly and bears somewhat profusely once it has made its home in its new surroundings. In the island of Hawaii, which is absolutely tropical on its southern slopes, though tempered by trades to the north, vines have been known to bloom within ten months after planting, but it is not fair to expect a crop until the second year. Once planted, with the ground fairly clean around the trees used as natural supporters, the cost of maintaining the plantation is very small. Several times during the year the grass and weeds would have to be cut from about the vines, but other than that the trimming and gathering of the pods furnish light work for the daughters of a family. The pods picked at their maturity are cured by drying under cover, but this is light work and the process would be readily learned. In fact it is probable that once the industry gets a secure foothold central curing establishments will spring up in the midst of any producing district.

As to the future of the industry, it would appear that nothing more is needed than that production be protected, for the demand seems almost unlimited. One New York importer has asked for from 10,000 to 20,000 pounds a year of high-class product, and on this the price must vary from \$4 to \$8.50 per pound. Each vine will produce about 25 full-sized pods per year. To be of the very first class these pods must run 7 inches in length, and all the shorter ones classing as inferior grades. As it takes 100 of the cured pods to make a pound, the 1,000 vines usually planted to each acre would therefore mean 250 pounds of cured pods to each acre of the plantation. It can thus be seen that a vanilla of 5 acres should give a family a comfortable income, once the vine is in full bearing. The use of frequent cuttings from the growing vines makes it possible to renew the bearing vine and keep the plantation in constant health, so that in the absence of some disease or pest, none of which are now known, the productiveness of an estate would be practically interminable.

Apocryphal of the more or less general demand that a Southern man be appointed by the president to fill one cabinet position, the record of Southern cabinet officers is recalled. Montgomery Blair, of Maryland, Edward Bates of Missouri and James Speed of Kentucky were members of Lincoln's first cabinet, and Mr. Speed continued to serve in the second cabinet. In Grant's first cabinet were Cheswell of Maryland and Akerman of Georgia, and in his second were Eristow of Kentucky, Creswell of Maryland, and, for a brief period, James W. Marshall of Virginia. Hayes had among his advisers Carl Schurz of Missouri, Goff of West Virginia and Key and Maynard of Tennessee. Garfield called Hunt of Louisiana to the navy department and Arthur was served by him for more than a year. Harrison had the advice of Elkins of West Virginia, and Noble of Missouri. Gary of Maryland and Hitchcock of Missouri sat with McKinley, and Hitchcock is sitting with Roosevelt.

the pineapple is a strictly tropical product, and yet it is always to be had in the markets of the great cities of the temperate zone. The rich people who dwell in those cities can afford luxuries, and are willing to pay for them.

The pineapple men of Hawaii, arguing from these premises, saw that the pines eaten in the large cities of the mainland must have been shipped from some tropical region. They could not all be hot-house product. The producers of Hawaii had at least one large and very rich city right at their own door—the city of San Francisco. Why not reach out for that market, at least. And some of the bolder spirits among them made the first shipment of fresh pineapples to the mainland, crating the fruit in an attractive way and making the shipment by express to insure proper attention and prompt delivery at the other end of the road. The project was to ship the fruit from here, prepaid to an address in California, and at the first the matter was altogether an experiment.

It met with success, which should not have been surprising, because pineapples are constantly shipped from Jamaica to London, but which was most gratifying to the bold local man who had conceived of the project. And now the shipment of fresh pineapples to the coast has grown into a very important part of the business of the planters, and it is a branch that is capable of development to an incalculable degree.

The production of pineapples in the islands is increasing, steadily, and most satisfactorily. There are plantations on three of the islands, although pines are produced on all of the larger islands of the group. It is difficult to arrive at the exact figures in the matter of acreage of the plantations, but it has been estimated that 415 acres in the three islands of Oahu, Maui and Hawaii are

exclusively devoted to the cultivation of pineapples. This, of course, embraces only the larger plantations. Fifteen acres were planted to pines on Hawaii during the year, 15 acres on Maui and 235 acres on Oahu. This makes a total of 265 acres planted during the year.

The number of plants set out during the same period in the area devoted to the culture of pineapples was as follows: On Maui, 300,000; on Hawaii, 350,000; on Oahu, 23,400,000.

There were two new canneries built during the year, that of the Haiku Fruit & Packing Co. on Maui, and that of W. W. Bruner, Napoopoo, Hawaii. The Pearl City Fruit Company and the Hawaiian Pineapple Company each enlarged its original plant. The product of the canneries for 1903 was, approximately, 8,000 cases of first and second quality fruit. The product for the current year will be, approximately, 20,000 cases, according to the best estimates.

The pineapple, in its growth, is a plant having many peculiarities. Not the least of these, perhaps, is its manner of reproduction. The plant, from its setting out time, is usually eighteen months in coming to fruition, but the result is worth the waiting. Occasionally a plant will go over the first bearing period. When it does, that is when the big pines are borne. But, ordinarily, it may be figured that the plant will fruit at eighteen months. The fruit is gathered, and, after cutting, in the second year two plants spring from the stock of the old one, and there is a double yield from that plant. The ratoon process, however, can only be gone through with once. The plant, although it then dies, lives again. The crown of it has put out a plant, which makes from the cut fruit, although these plants from the crown are somewhat delicate. Every plant is constantly putting forth suckers,

which are the ordinary plants sold in nurseries for stock. Lastly, after the plant is useless for bearing, the whole thing is cut up and buried and from every leaf springs up a plant, which in its turn bears for two years and dies and lives again in its young.

Thus, when you once get stock, you will have stock all the time in constantly increasing quantity. Say a planter has one hundred acres in pines. These pines would be of various ages, not all bearing. The plants are set, on an average, 9,000 to the acre, which makes about 900,000 plants. It will be seen that the planter will have a stock that will enable him to set out as many plants as he desires on a small plantation, with abundance likewise to keep up his original acreage. The increased acreage is responsible for the short plant supply in the islands.

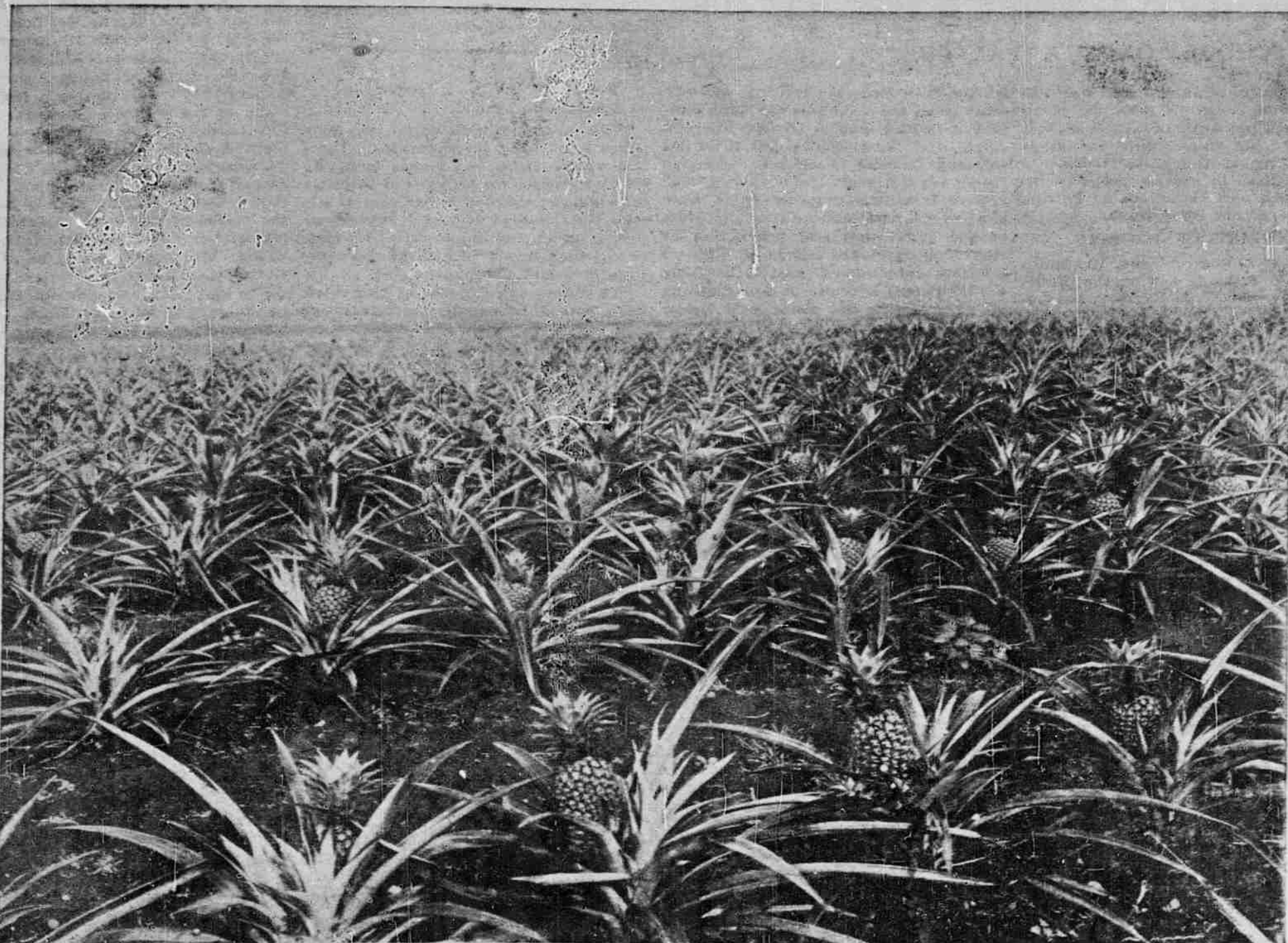
The process of canning pineapples, as it is carried on in the island plantations, is clean work, and very appetizing. In fact, if the man who uses Hawaiian canned pineapples were privileged to see the fruit prepared, he would but want to use the more of it. The golden apples, dead ripe, are delivered in wagons from the fields at the doors of the canneries. There each one has both ends slashed off by a couple of Japs, who stand with sharp knives beside the constantly growing piles of fruit. It goes on a long table to men at the peeling machines; then to other men who core it and trim it by machinery to the size that fits the can in which it is put up. After this, it is put through still another machine like a series of revolving covered knives, from which it drops in slices that fit into the can exactly.

The small fruit and the rich end slices, and the parings drop into baskets to be canned as "graded" fruit, or made into luscious pineapple jam, and these

ends and parings are carried along on an endless belt to a great cider press which squeezes out the juice to be made into syrup and poured into the cans of pineapple. For the fruit is canned in its own fragrant juices, with about 24 per cent of refined sugar. Not a drop of water is used. The man upon whose table Hawaiian canned pineapple appears, gets nothing but pineapple.

The dropped slices of the largest fruit are put into cans by neat women workers, the same number of slices to each can for all are of equal thickness, and the cans are passed along to a machine that fastens them with sanitary tops. Then they are carried to the exhaust, where the air in them is heated, to be presently released, and through the cooler, which gives them the final touch before being labeled for the market. The cans are tested again and again, to see that all air has been exhausted from them, and are then boxed to be sent to the ends of the earth. The so-called "graded" fruit, which is only the smaller fruit mulched, goes through a process precisely similar, and the pineapple jam in glass jars is a by-product also of most canneries. But all the fruit is of the very highest quality, and as it is canned dead ripe the full delicious flavor of the pines of Hawaii is all preserved.

The foreign trade of Japan for the year 1903, according to statistics just published, was the largest of any single year in the history of the empire, namely: Imports, \$155,652,000, an increase of \$23,800,000, as compared with 1902; exports, \$142,800,000, an increase of \$15,232,000, as compared with 1902. The value of our trade with Japan for 1904 was about \$72,000,000.



HAWAIIAN PINEAPPLE FIELD.

The pineapple seems to have been indigenous, as nearly as any vegetable product was indigenous, to the Hawaiian islands. At least, when the first white men came to the islands, pines were found as one of the table delicacies of the natives, and to this day there are wild pineapples growing in favorable localities on all of the islands.

Long ago, even before there was any systematic attempt at the cultivation of the fruit, it was found that the pineapples of Hawaii were much more juicy, and much sweeter than those found in any other portion of the tropical world. This fact was noted by the first white men who ate of the Hawaiian pines—and it has been noted since by experts from different quarters of the globe where this delicate fruit is grown.

It was noted likewise, that the wild pineapples of Hawaii were inclined to larger growth than the wild pines found anywhere else. The soil and climate of the islands, and of all the islands, seemed, indeed, to be especially adapted to the highest development of this most delicious of all tropical fruits. But it is only of late years that there have been found men in Hawaii sufficiently alive to the advantages afforded by nature here to aid by intelligent effort in reaping the harvest of wealth that is thus indicated. To be sure, pines have always been grown, more or less, by the natives of Hawaii—when they did not spare themselves the trouble of production by going out into the hill lands and picking the wild fruit. A few white men, also, at their country homes and in their gardens have grown pineapples for use on their own tables, and it has at all times been possible to pick up pineapples in the city markets of Honolulu. But they have not always been abundant—nor, if the truth must be told in large local demand. The Hawaiian pineapple has been one of those home blessings that was not appreciated because it was to be procured at our own doors. Doubtless, if the good people of these islands had had to import the product, the pineapple habit would by this time have grown to something like the proportions the character of the fruit would seem to deserve. The pineapple habit is growing, however, and will continue to grow apace.

The growth of the pineapple industry, like the growth of most industries in these islands, was attended with some considerable discouragements at the beginning. But this was particularly true with reference to the pineapple industry. It seemed that there was a malice fate attendant upon any project to grow anything else but sugar, in a commercial way, although everything else would grow. As a matter of fact, when the Pearl City project was started, it was at least four years before any progress was made at all that looked like achievement.

But the men who had faith in Hawaii, and in pineapples, persevered. How well they have been rewarded, let the figures tell. The beginning of the pineapple industry, as everybody knows, was small. There was, in the first place, the difficulty of getting land upon which to found the plantations. That was overcome, in more than one place, after severe discouragement. Then there was the difficulty of getting plants, but that, too, was overcome. It was only overcome in a measure, however, for there is still a short supply and will continue to be, perhaps, for many years. The men who have embarked in pineapple culture on a large scale have still need of all the plants that can be produced from their own stock, and are quite willing to buy at fair rates all that can be offered.

Lately, there has been the difficulty of getting the product to market. Market! That is the pet bugaboo of all the Silurians who would not have any enterprise started in the islands, in an agricultural way at least, because that enterprise never has been carried on. Do not plant anything, say the Silurians. You are too far from your market. What is the good of growing anything that you cannot sell? And, indeed, the Silurians are, right this far, that it is not profitable to grow a thing that you cannot sell. Where the Silurian calculations fail is that they do not want anybody to try to sell anything.

The pineapple men, not being at all Silurian, produced their article, a superior quality, and found their market. In the beginning, frightened a bit by the Silurians, perhaps, in spite of themselves, no effort was made to market anything but canned pineapples. Of these, it was soon found that the American market, a rich market and freely open to the producers of Hawaii since annexation, was quickly appreciative of a product of such excellence. It would take all that was offered by the pineapple canneries of the islands, and wanted more.

For several years, the island producers were content with the exploitation of this market. They had found, contrary to the prophecies of the Silurian, that the transportation companies were glad to ship all their product that was offered, and they saw at last the golden promise of reward for long years of labor opening before them. As a matter of fact, water carriage is the cheapest carriage, and a sea port need never want for means to reach the world with what it has to ship. So long as the winds blow over the sea, men will build ships—and other men will find the wherewithal to load them.

But this is to wander a little from the subject. The pineapple men, gaining confidence from success, made one more long stride forward in their business. Their canned product had been pronounced immeasurably superior to anything that had ever before been offered in the American market. Experts, visiting the islands, had found the fresh pines grown here better than anything produced anywhere in the world. Now,